

**Claims:**

1. A screening assay for identifying a selective IPC synthase inhibitor which assay comprises contacting a test compound with engineered cells whose capability to synthesize sphingolipids depends on the addition of exogenous phytosphingosine and which are capable of sustained growth via compensatory phospholipids, adding phytosphingosine, and determining IPC synthase inhibition by the test compound by reference to any cell growth inhibition.
- 10 2. Engineered cells whose capability to synthesize sphingolipids depends on the addition of exogenous phytosphingosine and which are capable of sustained growth via compensatory phospholipids.
3. Cells as claimed in claim 2 wherein the host strain is an lcb1/SLC1-1 strain.
- 15 4. Cells as claimed in claim 3 wherein the SLC-1 gene is under the control of the glyceraldehyde 3-phosphate dehydrogenase (GDP3) gene.
5. Cells as claimed in claim 2 wherein the host strain is lcb1/pGPD-SLC-1.
- 20 6. *S. cerevisiae* (lcb1/pGPD-SLC-1).
7. A selective IPC synthase inhibitor identified using the method of claim 1.

05831250, 050804